FUTURE FISHERIES IMPROVEMENT PROGRAM
GRANT APPLICATION
(please fill in the highlighted areas)

I. APPLICANT INFORMATION

A. Applicant Name: Jim Tolton

B. Mailing Address: 3420 42nd Ave W

C. City: Seattle State: WA Zip: 98199

Telephone: 206-661-0462

D. Contact Person: Same as above

Address if different from Applicant:

City: State: Zip:

Telephone:

E. Landowner and/or Lessee Name (if other than Applicant): Same as above

Mailing Address:

City: State: Zip:

Telephone:

II. PROJECT INFORMATION*

A. Project Name: Weir Restoration to Improve Fish Movement and Floater Passage

River, stream, or lake: Big Hole River

Location: Township 4S Range 7W Section 11

County: Madison

B. Purpose of Project:

The purpose of this project is to repair a step rock weir structure designed to enhance fish movement and allow floater passage by directing water, particularly in low flow periods, to the center of the river.

C. Brief Project Description:

The weirs across the Big Hole River were constructed in 2010 as part of an irrigation infrastructure project. The project was sponsored by the Ruby Valley Conservation District and the Big Hole Watershed Committee. The headgate was replaced in 2010 and a single rock weir with an elevation drop of approximately 4 ft was modified to include an additional 3 weirs to step the water down more gradually reducing the scour and making the structure much friendlier to floater and fish passage. The design of the weirs was to focus flows, particularly at low flows to the center of the channel. High water the spring following construction (2011) caused erosion of the 2nd 3rd and 4th weir structures on the west side of the river (see attached photos and engineering report). While the main flow of the river continues in the center of the channel the erosion around the end of the weirs directs a significant portion of the water around the west side of the structures. This is not only causing erosion it is making floater passage more difficult because flows going through the center of the channel are now less. If the problem is not rectified it is likely that erosion on the west side of the weirs will accelerate and could further undermine the weir structures, The proposed work would involve adding rock on the west end and tying the existing weirs back into the banks approximately 15 to 20 feet. A 15 to 20 foot length of river banks adjacent to the weir structures will be rip rapped to provide additional protection. The intent is to restore the structures so that the primary flow channel will be directed to the center of the river and maintain good fish and boater passage.

D. Length of stream or size of lake that will be treated: 375 feet

E. Project Budget:

Grant Request (Dollars): $ 12,500

Contribution by Applicant (Dollars): $ 2,500 In-kind $ 0
(salaries of government employees are not considered as matching contributions)

Contribution from other Sources (Dollars): $ 0 In-kind $ 0
(attach verification - See page 2 budget template)

Total Project Cost: $ 15,000

F. Attach itemized (line item) budget – see template

G. Attach specific project plans, detailed sketches, plan views, photographs, maps, evidence of landowner consent, evidence of public support, and/or other information necessary to evaluate the merits of the project. If project involves water leasing or water salvage complete supplemental questionnaire (fwp.mt.gov/habitat/futurefisheries/supplement2.doc).

H. Attach land management and maintenance plans that will ensure protection of the reclaimed area.

III. PROJECT BENEFITS*

A. What species of fish will benefit from this project?:

Brown trout, rainbow trout, other native fish including mountain whitefish, longnose, mountain and white suckers, mottled sculpin and longnose dace.

B. How will the project protect or enhance wild fish habitat?:

The project will enhance and protect the habitat by maintaining the weir structure designed to channel water flow toward the center of the river making it easier for fish to move through the river.

C. Will the project improve fish populations and/or fishing? To what extent?:

The project will improve fish populations and fishing by maintaining water flow toward the center of the river making it easier for fish to move through the river. The one-weir structure that was present prior to modification was a significant impediment to float fishing. At lower flows float fishing was only possible by portaging a raft or drift boat over the structure. The new structure is much more floater friendly as the drops between weirs is approximately 18 inches and flows are focused toward the center of the channel.

D. Will the project increase public fishing opportunity for wild fish and, if so, how?:

The project will maintain water flow toward the center of the river making it easier for boaters to navigate the river thereby increasing the public fishing opportunity and floater safety.

E. If the project requires maintenance, what is your time commitment to this project?:

This project maintains weirs that are in the river. We will monitor and assess ongoing maintenance related to this project. It is anticipated that the proposed project will take care of any maintenance needs in the near term and long term.

F. What was the cause of habitat degradation in the area of this project and how will the project correct the cause?:

The river eroded behind the west end of the weirs installed in 2010/2011 which were not keyed in to the river bank at a great enough length to prevent erosion in very high water situation such as those that occurred in 2011. Restoring the weirs will return the project to its original intent with the main flow of the river being in the center of the channel assuring that fish movement and boat movement on the river will be possible. If not done, the river will continue to flank around the weirs. Keying the structure into the bank at a greater distance will provide reasonable assurance that a similar problem will not occur in the future.

G. What public benefits will be realized from this project?:

Keeping the low flow channel concentrated in the center of the river and having a gradual drop through the weirs will enable fish to pass over the diversion system and boaters to safely float the river past the diversion.

H. Will the project interfere with water or property rights of adjacent landowners? (explain):

No

I. Will the project result in the development of commercial recreational use on the site?: (explain):

No

J. Is this project associated with the reclamation of past mining activity?:

No

Each approved project sponsor must enter into a written agreement with the Department specifying terms and duration of the project.

IV. AUTHORIZING STATEMENT

I (we) hereby declare that the information and all statements to this application are true, complete, and accurate to the best of my (our) knowledge and that the project or activity complies with rules of the Future Fisheries Improvement Program.

Applicant Signature: _____ Date: _____

Sponsor (if applicable): _____

***Highlighted boxes will automatically expand.**

Mail To: **Montana Fish, Wildlife & Parks**
Habitat Protection Bureau
PO Box 200701
Helena, MT 59620-0701

Incomplete or late applications will be returned to applicant.

Applications may be rejected if this form is modified.

*****Applications may be submitted at anytime, but must be received by the Future Fisheries Program office in Helena before December 1 and June 1 of each year to be considered for the subsequent funding period.*****